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PATENT CASE NO. 8371/13

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application:	)
	)
Robert M. Setbacken et al.	)
	) Group Art Unit: 2878
Serial No.: 10/829,546	)
	) Examiner: Monbleau, Davienne N.
Filed: April 22, 2004	)
	)
For: POSITIONAL ENCODER ASSEMBLY	)
	)

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Commissioner for Patents
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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants request review of the Office Action mailed November 21, 2006 (hereinafter "the Office Action"), in the above-identified application as to Claims 1-14 and 27-47. No amendments are being filed with this request. This request is being filed with a Notice of Appeal. The review is requested for the reasons stated on the attached sheets. No more than five (5) pages are provided. Claims 15-26 have been cancelled.

REMARKS

A. Objections to Title and Abstract

In the Office Action, the title and Abstract were objected to for not being descriptive. Applicants traverse the objections in that both the title and the Abstract are of proper form. Evidence of this is the fact that the title and Abstract have not been objected to in previous Office Actions. Regarding the objection to the Abstract, there is no specific reasons given for the objection and so Applicants will leave it to the Examiner to propose an acceptable Abstract. Regarding the title, Applicants will amend the title in the manner proposed by the Examiner once the Pre-Appeal Conference is completed.

B. Okumura et al. and Leong et al.

1. Claims 1, 3-6, 11-14 and 46

Claims 1, 3-6, 11-14 and 46 are rejected under 35 U.S.C. § 103 as being obvious in view of Okumura et al. and Leong et al. Applicants traverse the rejection for several reasons. First, Leong et al. is directed to non-analogous art. The test for non-analogous art is two fold: 1) whether the reference within the inventors' field of endeavor; and 2) if the reference is not within the inventors' field of endeavor, whether the reference is reasonably pertinent to the particular problems in which the inventors are involved. *In re GPAC Inc.*, 57 F.3d 1573, 1578, 35 USPQ2d 1116, 1120 (Fed. Cir. 1995). Regarding the first test, the field of endeavor of the claimed invention is the field of positional encoder assemblies. Leong et al. fails the first test since it regards an optical navigation sensor. Regarding the second test, Applicants are concerned with providing improved performance and reliability by providing an exact height of the sensor above a circuit board assembly as explained in detail in paragraphs 0004 and 0009 of Applicants' Specification. Leong et al. fails the second test since it is directed to a structure for preventing foreign matter from entering an aperture of an optical navigation sensor (Col. 2, ll. 24-36). Accordingly, the rejection is improper.

Assuming for argument's sake that Leong et al. is directed to analogous art, the rejection is still improper. Independent claim 1 recites a positional encoder assembly "wherein the lead frame is disposed on the circuit board assembly such that the sensor is disposed at a predetermined elevation with respect to the circuit board assembly." The Office Action asserts that it would have been obvious to apply Leong et al. snap feature 74 to Okumura et al.'s housing 8 to fix it to a frame of Okumura et al. Applicants do not see the relevance of such a combination since the claim recites that the lead frame is disposed on a circuit board and the Office Action has conceded that Okumura et al. does not disclose either a lead frame or a circuit board.

The Office Action further asserts that it would have been obvious to use a lead frame disposed on a circuit board in Okumura et al.'s device in the manner disclosed with respect to Leong et al.' housing 60. However, Leong does not disclose such a lead frame. As shown in FIG. 3 of Leong et al., the housing 60 is inserted through a planar structure, which Applicants

will assume for arguments sake is a circuit board. The housing 60 is not disposed on the planar structure as recited in claim 1. Instead, housing 60 is disposed on a planar support. The planar support is not a circuit board because it is denoted by diagonal lines instead of the vertical lines of the circuit board 52. Since there is no suggestion in Leong et al. to have housing 60 disposed on a circuit board, the rejection is improper.

The rejection is improper for the additional reason that Leong et al. does not disclose nor suggest a sensor "disposed at a predetermined elevation with respect to the circuit board assembly." As shown in FIGS. 3-4 of Leong et al., the contacts 68 appear to pass through a circuit board. The circuit board is not constrained as to where it engages the contacts 68 relative to the die 62. According, the die 62 is not a predetermined elevation with respect to the circuit board as required by claim 1.

Claims 3-6, 11-14 and 46 depend directly or indirectly on claim 1 and so their rejections are improper for at the reasons given above with respect to claim 1.

2. Claims 27, 28, 34-38, 44 and 45

Claims 27, 28, 34-38, 44 and 45 are rejected under 35 U.S.C. § 103 as being obvious in view of Okumura et al. and Leong et al. Applicants traverse the rejection for several reasons. First, Leong et al. is directed to non-analogous art as pointed out above in Section B.1. Second, independent claims 27 and 37 each recites a positional encoder assembly that includes a lead frame supported upon a circuit board assembly. As pointed out above in Section B.1, Leong et al. does not disclose nor suggest altering Okumura et al. to have a lead frame supported upon a circuit board assembly.

Claims 28, 34-36, 38, 44 and 45 depend directly or indirectly on claim 27 or claim 37 and so their rejections are improper for at the reasons given above with respect to claims 27 and 37.

C. Okumura et al., Leong et al. and Chin et al.

Claims 7-10, 30-33, 40-43 and 47 are rejected under 35 U.S.C. § 103 as being obvious in view of Okumura et al., Leong et al. and Chin et al. Applicants traverse the rejection in that Leong et al. is directed to non-analogous art as pointed out in Section B.1.

The rejection is improper for the additional reason that claims 7-10, 30-33, 40-43 and 47 depend directly or indirectly on either claim 1, claim 27 or claim 37 which recite a positional

encoder assembly that has either 1) "the lead frame is disposed on the circuit board assembly such that the sensor is disposed at a predetermined elevation with respect to the circuit board assembly" (claim 1) or 2) a lead frame supported upon a circuit board assembly (claims 27 and 37). As pointed out in Sections B.1-2, Leong et al. does not suggest altering Okumura et al. to dispose a lead frame on a circuit board assembly in the manner recited in claims 1, 27 and 37. Chin et al. does not overcome the deficiencies of Leong et al. since it does not suggest disposing a lead frame on a circuit board assembly. This was pointed out in Applicants' Amendment of May 23, 2006 and Pre-Appeal Brief filed on October 12, 2006 and essentially conceded with the Notice of Panel Decision from Pre-Appeal Brief Review mailed on November 21, 2006.

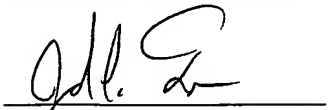
D. Okumura et al., Leong et al. and Franklin et al.

Claims 2, 29 and 39 are rejected under 35 U.S.C. § 103 as being obvious in view of Okumura et al., Leong et al. and Chin et al. Applicants traverse the rejection in that Leong et al. is directed to non-analogous art as pointed out in Section B.1.

The rejection is improper for the additional reason that claims 2, 29 and 39 depend directly on either claim 1, claim 27 or claim 37 which recite a positional encoder assembly that has either 1) "the lead frame is disposed on the circuit board assembly such that the sensor is disposed at a predetermined elevation with respect to the circuit board assembly" (claim 1) or 2) a lead frame supported upon a circuit board assembly (claims 27 and 37). As pointed out in Sections B.1-2, Leong et al. does not suggest altering Okumura et al. to dispose a lead frame on a circuit board assembly in the manner recited in claims 1, 27 and 37. Franklin et al. does not overcome the deficiencies of Leong et al. since it does not suggest disposing a lead frame on a circuit board assembly. This was pointed out in Applicants' Amendment of May 23, 2006 and Pre-Appeal Brief filed on filed on October 12, 2006 and essentially conceded with the Notice of Panel Decision from Pre-Appeal Brief Review mailed on November 21, 2006.

In summary, the Examiner has clearly failed to meet his burden to establish a *prima facie* case of unpatentability of the pending claims in the present Office Action.

Respectfully submitted,



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